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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/599,818	KAHLMAN ET AL.
	Examiner	Art Unit
	Tamara Ashford	2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-27 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 October 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/9/07, and 11/8/07</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

This is in response to the application filed on October 11, 2006 in which claims 1-27 are presented for examination.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/IB05/51143, filed on 07 April 2005.

Drawings

2. The drawings are objected to because of the following informalities:
- a. In FIG. 4, reference number 222 illustrating the clamper should be changed to 221 to coincide with the description (page 9, line 15) and the numbering format of the other embodiments.
 - b. In FIG. 4, reference number 223 illustrating the turntable should be changed to 222 to coincide with the numbering format of the other embodiments.

In addition, reference number 223 is not mentioned in the description. In changing reference number 223 to 222, a description of reference 222 should also be incorporated into the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

 4. The abstract of the disclosure is objected to because it does not avoid the form and legal phraseology often used in patent claims, such as "said" in lines 3 and 5 thereof. Appropriate correction is required. See MPEP § 608.01(b).

 5. The disclosure is objected to because of the following informalities:
 - a. "an other" (page 1, line 13; page 6, line 33; and page 7, line 13) should be changed to -- another --.
 - b. "data layer 112" (page 8, line 19) should be changed to -- data layer 102--.
 - c. "This provide the" (page 9, line 15) should be changed to -- This provides the --.
- Appropriate correction is required.

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

7. Claims 2, 8, 13, and 22 are objected to because of the following informalities:
- a. claim 2 is dependent on claim 1, therefore the limitations "a disc (1; 101; 201; 301; 401) which is provided with at least one layer (2; 102; 202; 302; 403) for optically reading and/or writing information, wherein the disc (1; 101;

201; 301; 401) comprises at least one integrated circuit (3; 103; 203; 303; 403), wherein said integrated circuit (3; 103; 203; 303; 403) comprises a first communicator (4; 104; 204; 304; 404) for communication with at least a second, external, communicator (11; 111; 211; 311; 411) during use," are duplications of the limitations inherited from claim 1 and should be deleted.

- b. in claim 8, "one layer" (line 2) should be changed to -- one data layer --.
- c. in claim 13, "one" (line 6) should be deleted.
- d. in claim 22, "side aced away" (line 8) should be changed to -- side is spaced away --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
9. Claims 2, 10, 12, 16-18, and 20-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Regarding claims 2, 10, 12, 21, and 22, the phrase "for instance" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claims 23-25 inherit the indefiniteness of claim 12 from which they depend.

b. Regarding claim 16, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claims 17-18 and 20 inherit the indefiniteness of claim 16 from which they depend.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 4, 5, 10-13, 15, 21, 23, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Diezmann et al. (6,044,046).

Regarding claim 1, Diezmann et al. (hereinafter referred as "Diezmann") discloses an information carrier comprising a disc (Fig. 1, including 3) which is provided with at least one data layer (Fig. 2, 3) for optically reading and/or writing information. The disc comprises an annular clamping part (Fig. 3, area between 65 and 50) that is held by a clamp (Fig. 3, 65), and at least one integrated circuit (Fig. 7a, 11) with a first communicator (Fig. 7a, 12) for communication with at least a second external communicator (Fig. 3, 11 as part of 65). As shown in figure 3, the first communicator extends in a center area which is enclosed by the annular clamping part.

Regarding claims 4 and 5, Diezmann discloses the first communicator is part of the integrated circuit (Fig. 7a, 11 and 12), and the combined component is an unbonded chip (Column 10, lines 8-11).

Regarding claim 10, Diezmann discloses first communicator comprises at least an optical transmitter and/or receiver for transmitting and/or receiving optical signals (Column 10, lines 53-67).

Regarding claim 11, Diezmann discloses the disc is arranged to be rotated about a virtual rotation axis (Fig. 3, 70) that extends through the center point of the center hole during use.

Regarding claim 12, Diezmann discloses the integrated circuit is located on a first side of the disc (Fig. 2, 3).

Regarding claim 13, Diezmann discloses a device for recording and/or reproducing information (Fig. 3) on/from at least one data layer of a rotatable disc comprising: at least one second communicator (Fig. 3, 11 and 51) for communicating with at least a first communicator (Fig. 3, 12) of a disc (Fig. 1, 1) according to claim 1.

Regarding claim 15, Diezmann discloses the second communicator comprises a coil (Column 6, lines 43-45).

Regarding claim 21, Diezmann discloses the integrated circuit is located on a first side of the disc (i.e. top side of disc just under protective layer as shown in Fig. 3) and the second communicator (Fig. 3, 11 and 51) is positioned such that it is arranged opposite the first side of the disc.

Regarding claim 23, Diezmann discloses the second communicator comprises a dipole antenna (Column 3, lines 60-64).

Regarding claim 26 Diezmann discloses a method for manufacturing an information carrier in which a disc is injection molded such that the disc comprises no central aperture (Column 5, lines 52-55), then a center hole is milled out in a following process step. As discussed above with regard to claim 1, a central part of the disc is provided with at least one integrated circuit (Fig. 7a, 11), comprising a first communicator (Fig. 7a, 12) for communication with at least a second external communicator (Fig. 3, 11 and 51) during use.

12. Claims 1, 3, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu et al. (US 6,356,517 B1).

Regarding claim 1, Liu et al. (hereinafter referred as "Liu") discloses an information carrier comprising a disc (Fig. 2, 12) which is provided with at least one data layer (Fig. 2, 10) for optically reading and/or writing information. The disc comprises an annular clamping part (Fig. 2, 124) that is held by a clamp (Fig. 5), and at least one integrated circuit (Fig. 2, 14) with a first communicator (Fig. 2, 146) for communication with at least a second external communicator (Fig. 5, 20). As shown in figure 2, the first communicator extends in a center area which is enclosed by the annular clamping part.

Regarding claim 3, Liu discloses the first communicator extends in an annular transition part (Fig. 1, 126, and Column 2, lines 10-16) of the disc.

Regarding claim 6, Liu discloses the integrated circuit is located in the center area of the disc surrounding the hole (Fig. 2, 14).

Regarding claim 8, Liu discloses the data layer extends outside the center area of the disc (Fig. 2, 10).

13. Claims 1, 13, 14, 16-18, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lenssen et al. (US 20020036977 A1).

Regarding claim 1, Lenssen et al. (hereinafter referred as "Lenssen") discloses an information carrier comprising a disc (Fig. 1, 1) which is provided with at least one data layer (Fig. 1, 9) for optically reading and/or writing information. The disc comprises an annular clamping part (Fig. 7, area clamped by 52) that is held by a clamp (Fig. 7, 52), and at least one integrated circuit (Fig. 1, 10) with a first communicator (Fig. 2, 13) for communication with at least a second external communicator (Fig. 7, 54 and 55). As shown in figure 7, the first communicator extends in a center area which is enclosed by the annular clamping part.

Regarding claim 13, Lenssen discloses a device for recording and/or reproducing information (Fig. 7, 40 and Paragraphs 69-70) on/from at least one data layer of a rotatable disc comprising: at least one second communicator (Fig. 7, 54 and 55) for communicating with at least a first communicator (Fig. 7, 13) of a disc (Fig. 1, 1) according to claim 1.

Regarding claim 14, Lenssen discloses second communicator is arranged to send and/or transmit data to the integrated circuit located in the center area of the disc during rotation of the disc by the device (Paragraph 65).

Regarding claim 16, Lenssen discloses a clamp (Fig. 7, 52, and Paragraph 70) and a turntable (Fig. 7, 51) which are arranged for holding the annular clamping part of the disc.

Regarding claims 17 and 18, Lenssen discloses the second communicator may be located in both the clamp and the turntable (Fig. 7, 54, and 55), or in the turntable alone (i.e. outside the clamp) (Fig. 8, 54 and 55; Paragraphs 71-72).

Regarding claim 22, Lenssen discloses the integrated circuit is located on a first side of the disc (in the protective layer on the top side of the disc in Fig. 3), and the second communicator (Fig. 8, 54 and 55, with integrated circuit placement as shown in Fig. 3) is positioned such that it is arranged opposite a second side of the disc (bottom side of disc in Fig. 3) during use.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 7, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenssen (US 20020036977 A1) in view of Chen (US 6,690,642 B2).

Regarding claims 7 and 27, Lenssen discloses a method for manufacturing an information carrier wherein a disc is injection molded such that the disc comprises a central aperture (Fig. 1, 1, and Paragraph 30). Lenssen does not disclose the information carrier is provided with a central bridge part. As discussed above with regard to claim 1, Lenssen also discloses the disc comprises an integrated circuit comprising a first communicator for communication with a second external communicator. Chen discloses an information carrier (Fig. 3, 1) provided with a cap (Fig. 3, 2) for bridging the center hole of the carrier to provide an uninterrupted printing surface for the disk. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a cap, such as that described by Chen, to bridge the center hole of the disk and provide an uninterrupted printing surface. Chen teaches the cap may be implemented as a cover layer that covers the entire surface of the disc (Fig. 8, 2"). Since Lenssen teaches that the integrated circuit may be imbedded in the protective layer of the disc (Fig. 3, and Paragraph 66), an information carrier with

an integrated circuit located in a bridge part is a possible combination within the scope of the combined teachings of Lenssen and Chen.

17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diezmann (US 6,044,046) in view of Hiroaki et al. (EP 0996124 A1).

Regarding claim 9, Diezmann discloses the first communicator comprises a coupling element (Column 10, lines 8-9), but is silent as to whether the element is an antenna. Hiroaki et al. (hereinafter referred as “Hiroaki”) discloses an integrated circuit utilizing an antenna (Paragraphs 9 and 10) for receiving and/or transmitting electromagnetic signals. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a known coupling means, such as an antenna as taught by Hiroaki, to transmit and/or receive electromagnetic signals.

18. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diezmann (US 6,044,046).

Regarding claim 19, Diezmann does not disclose the coil diameter; however it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the size and/or the position of the second communicator to effectively communicate with the integrated circuit. Therefore, a second communicator with a coil that has an outer diameter smaller than the inner diameter of the clamping part is within the scope of the invention disclosed by Diezmann. In addition, a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

19. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenssen (US 20020036977 A1).

Regarding claim 20, Lenssen does not explicitly disclose the clamper and/or turntable comprises a central aperture in which the second communicator is located. However, Lenssen states the second communicator may lie in the turntable (Fig. 8, 54, and Paragraph 72), and it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the turntable such that it has a hole or groove to house the second communicator to maintain the height of the turntable (i.e. as opposed to a stacked configuration of the second communicator on top of the turntable).

20. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diezmann (US 6,044,046) in view of Brollier (US 20040052203 A1).

Regarding claim 24 and 25, Diezmann does not disclose the dipole antenna is substantially circular. Brollier discloses a communicator (Fig. 25, 64) comprising a dipole antenna of substantially circular shape (Fig. 25, 58) with concentric folded arms. The communicator is located between the arms such that one arm is on an inner side (i.e. side closest to the center of disc) of the communicator and the other is on an outer side (i.e. side farther from the center of the disc) of the communicator. Diezmann states the second communicator may consist of a coil ring (Column 6, lines 43-44), therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a circular shape for the dipole antenna, as with

Brollier, to satisfy the communication function. Diezmann illustrates the second communicator is located directly above the first communicator, therefore it would have been obvious to one of ordinary skill at the time the invention was made to maintain this location when using a dipole antenna such as that taught by Brollier. With this location, it can be inferred that the concentric arms of the antenna would be concentric with the path of the disc during use. It also would have been obvious to one having ordinary skill in the art at the time the invention was made to position the antenna such that the path of the first communicator is between the arms to aid in communication between the first and second communicators.

Allowable Subject Matter

21. Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

22. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or reasonably suggest an integrated circuit comprising a first communicator that extends at least in the central point of the disc.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure includes Opheij (US 4,862,447) which discloses a disc with no center hole (Fig. 1, 1).

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Ashford whose telephone number is (571)270-5877. The examiner can normally be reached on Mon-Fri 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571)272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. A./
Examiner, Art Unit 2627

/Craig A. Renner/
Primary Examiner, Art Unit 2627